1,7-Dicarbadodecaborane(12)

Other names:	m-Carborane
	1,7-Dicarbadodecaborane
	m-Barene
	m-Decarborocarborane
	m-Dicarbadodecaborane
	Neobarene
	Neocarborane
Inchi:	InChI=1S/C2H12B10/c1-3-2-4(1,3)6(1)8(2,4)10(2)7(2,3)5(1,3)9(1,6)11(5,7,10)12(6,8,9)10
InchiKey:	NHBIWBXUPGPZST-UHFFFAOYSA-N
Formula:	C2H12B10
Mol. weight [g/mol]:	144.23
CAS:	16986-24-6

Physical Properties

Property code	Value	Unit	Source
hsub	67.50	kJ/mol	NIST Webbook; Stephenson and Malanowski, 1987
hsub	58.50 ± 1.00	kJ/mol	NIST Webbook; Pilcher and Skinner, 1983
ie	10.78 ± 0.05	eV	NIST Webbook; Vondrak, 1987
ie	10.19	eV	NIST Webbook; Fehlner, 1975
ie	10.14	eV	NIST Webbook; Orlov, Pustobaev, et al., 1989
ie	10.10 ± 0.20	eV	NIST Webbook; Orlov, Pustobaev, et al., 1988
ie	10.10	eV	NIST Webbook; Vondrak, 1987
rinpol	1124.00		NIST Webbook; Stuchlik and Pacakova, 1979
rinpol	1147.00		NIST Webbook; Stuchlik and Pacakova, 1979
rinpol	1150.00		NIST Webbook; Stuchlik and Pacakova, 1979
rinpol	1172.00		NIST Webbook; Stuchlik and Pacakova, 1979
rinpol	1124.00		NIST Webbook; MSDC-RI
ripol	1616.00		NIST Webbook; Stuchlik and Pacakova, 1979

ripol	1640.00		NIST Webbook; Stuchlik and Pacakova, 1979
ripol	1616.00		NIST Webbook; MSDC-RI
sl	211.80	J/mol×K	NIST Webbook; Gorbunov, Zalukaev, et al., 1981
tt	280.10 ± 0.20	K	NIST Webbook; Gorbunov, Zalukaev, et al., 1981, 2
tt	280.10 ± 0.20	K	NIST Webbook; Gorbunov, Zalukaev, et al., 1981

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpl	229.20	J/mol×K	298.15	NIST Webbook; Gorbunov, Zalukaev, et al., 1981
hsubt	63.30	kJ/mol	378.00	NIST Webbook; Stephenson and Malanowski, 1987

Sources

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C16986246&Units=SI

Legend

cpl: Liquid phase heat capacity
hsub: Enthalpy of sublimation at standard conditions
hsubt: Enthalpy of sublimation at a given temperature
ie: Ionization energy
rinpol: Non-polar retention indices
ripol: Polar retention indices
sl: Liquid phase molar entropy at standard conditions
tt: Triple Point Temperature

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